

SIGHT-SAVING CLASSES

THEIR ORGANIZATION AND ADMINISTRATION

HAZEL HADLEY, *Director of Special Classes*
Ohio State Department of Education

WINIFRED HATHAWAY, *Associate Director*
National Committee for the Prevention of
Blindness

1927

Publication No. 30
OF
THE NATIONAL COMMITTEE FOR THE
PREVENTION OF BLINDNESS, INC.
370 Seventh Ave., New York, N. Y.



AMERICAN FOUNDATION
FOR THE BLIND INC.

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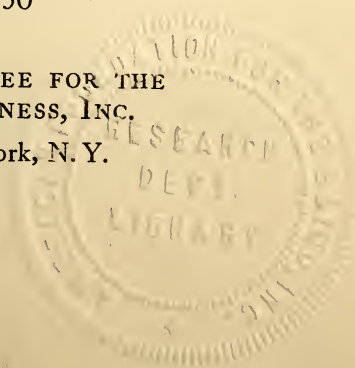
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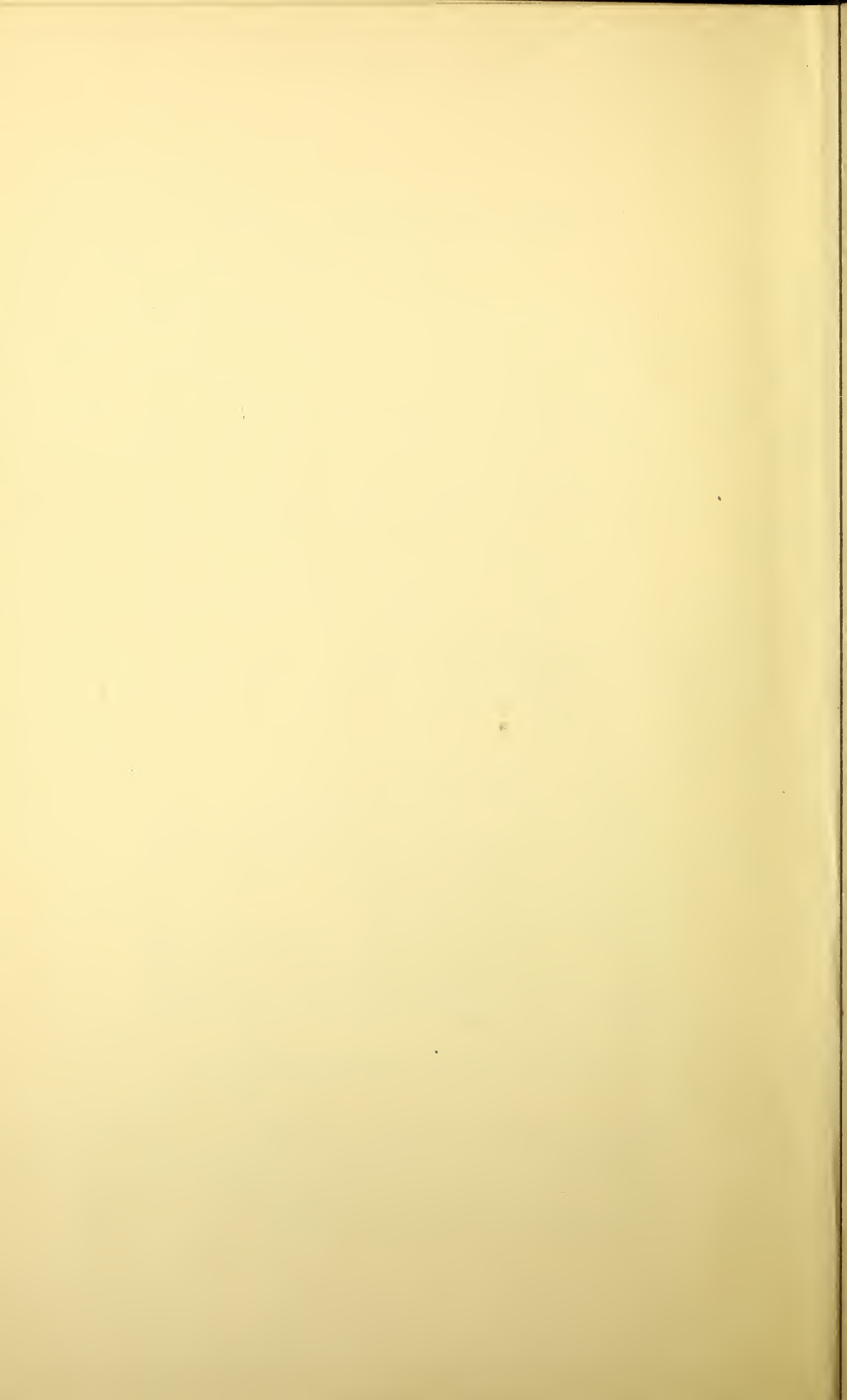
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Introduction

SIGHT-SAVING classes as a form of specialized education are a comparatively recent movement. They originated in England in 1908. The first class in America was established in Boston in 1913 through the efforts of Mr. Edward E. Allen. The growth has been relatively slow, and much time has been spent in careful experimentation. They have, however, been rather generally accepted by school administrators as being an essential part of a school system differentiated to meet varying educational needs.

It is felt that enough experience has been accumulated in the administration of sight-saving classes to make it worth while to issue a publication which will be of service to boards of education, school superintendents, and general and special supervisors, who may contemplate the establishment of such classes. It is, however, to be kept in mind that the work is still in an experimental stage and that the statements made in this publication are intended to meet present needs, with the full realization that in years to come they will require considerable revision.

The National Committee for the Prevention of Blindness issued in 1919 a handbook intended to cover the various phases of sight-saving class work as then accepted. This is being replaced by two publications, one dealing with methods of teaching sight-saving classes;* the other, with the administration of such classes.

Aims

The aims of sight-saving classes have been admirably stated in "SIGHT-SAVING CLASSES—CLEVELAND PUBLIC SCHOOLS":†

1. To educate pupils with the least possible eyestrain.
2. To teach them enough eye hygiene to conserve the vision they have.

* *Methods of Teaching Sight-Saving Classes*, by Estella Lawes. Published by the National Committee for the Prevention of Blindness, 370 Seventh Avenue, New York City.

† *Sight-Saving Classes—Cleveland Public Schools*, Coffin and Peck, p. 9.

3. To provide such vocational guidance as will prevent them from choosing occupations which would be injurious to their eyes.

Conservation of Vision

From the standpoint of conservation of sight, every school system has to consider three groups of children:

1. Children with normal vision.

The responsibility of the school system for this group is to make every effort to keep the vision normal through attention to general health and eye hygiene and to the correct physical equipment of the classroom, including correct lighting, seating, ventilation and the use of well printed textbooks.*

2. Children with defects of vision that may be corrected or diseases of the eye that may be cured.

Here the responsibility must of course include the benefits provided for the first group and in addition co-operation with the parents in having the necessary correction or treatment that will bring the child's vision as near to normal as possible.

3. Children with serious eye difficulties who, after proper refraction and treatment, cannot be profitably educated in the regular grade. This group includes children with serious eye diseases involving loss of vision where treatment over an extended period must be given.

The responsibility for this group is even more complex. It is with the educational problem it presents that this publication is concerned.

Eligibility to Sight-Saving Classes

Experience indicates that one child in every five hundred of the school population requires the advantages of a sight-saving class. In crowded and insanitary districts the percentage may be somewhat higher.

For all practical purposes, children having less than 20/200 vision by Snellen Chart measurement are considered educationally blind and are usually eligible for schools or classes established for the education of blind children. Between this group and the group that

* *Conserving the Sight of School Children.* A joint report of the National Education Association and the American Medical Association with the co-operation of the National Committee for the Prevention of Blindness.

may be profitably educated in the regular grades are children with eye troubles of four types, which make education in regular school classes impractical or impossible:

1. Children having more than 20/200 vision but not possessed of sufficient visual acuity to enable them to read ordinary print or to see figures or letters on the blackboard.

2. Children who may be able to read ordinary type but only at the expense of their vision or general health.

3. Children with progressive eye troubles.

4. Children with diseases of the eye that seriously affect vision.

The question at once arises as to what shall be the ophthalmological guides which shall serve for the selection of pupils to be admitted to such special classes. Certain states, notably Ohio and Massachusetts, have adopted rather detailed specifications and rules, and any one interested may secure these by writing to the State Departments of Education.

In general, it is believed that the purpose of these classes will be satisfied by such selections as may be agreed upon by local ophthalmologists in consultation with school officials. Of course, such determinations should provide for the admission of the children who are classified in the four groups as given above.

In the first group, selected in part by simple acuity of vision tests and in conference with the ophthalmologist after corrections are made, will be found those children who cannot keep pace with their classmates without an undue amount of attention from the teacher, and those who, if required to use the regular school books and appliances for the same periods of time as their classmates, may suffer irreparable damage to their vision.

In the second group will be found those children with errors of vision not susceptible of complete correction by lenses and who need to have their close vision work minimized in the interest of their health—children with mixed astigmatism, with permanent corneal cloudiness or scars resulting from disease or accident, with cloudiness of liquid eye media, and with faults of development making permanent life handicaps.

In the third group will be found that class of children prompting the establishment of the English classes for myopes, namely, the children whose eyeballs are too long to permit proper focusing of

parallel rays of light on the retina, and with walls of the globes weak, thin, or thinning. These children, with close study from common schoolbook type, are apt to have the nearsightedness grow progressively worse because of stretching of the eyeball until eventually blindness may result. Properly organized sight-saving classes may avert profound damage until the eye change becomes more or less arrested.

In the fourth group will be found those children with acquired or hereditary disease making it imperative that special safeguards be utilized in giving them such an education as may safely be acquired without further impairment of their vision. Many in this group may require admission to the sight-saving class for portions of their school career only or while under continuous treatment. In any event, a child in this group will be more likely to be given a chance of having the disease arrested or cured if handled by those greatly concerned with conservation of vision as well as promotion of the child's education.

Determination of the Need for a Sight-Saving Class

Any superintendent of schools may determine roughly the number of school children in his charge who may be eligible for attendance at sight-saving classes by using the estimate given earlier in this publication, namely, that one out of 500 children usually has such defective vision as will make it impossible for him to take work with profit in the regular public school; in industrial cities this percentage may be somewhat higher.

When the probable need in a city has been determined, the next step toward the establishment of sight-saving classes is to secure the names of the children probably eligible through school records already available. This is comparatively easy when a system of medical inspection has been in use which has made a record of the eye examinations. Such a list of pupils can be secured through the assistance of the health department, of the schools and of special health teachers.

In many cities this preliminary study will be sufficient to warrant the superintendent in recommending to his school board that a class be established and the necessary appropriation be made for it. In other cases it may be necessary for the superintendent to secure



EXCELLENT LIGHTING AND WINDOW SHADES*

* Picture secured from Atlanta, Georgia, sight-saving class.



from his teachers a list of possible cases and have these referred for examination by an oculist. Of course, all such ocular examinations should be made in co-operation with the regular medical inspection corps.

Supervision

Ocular

Ocular supervision should be maintained for the majority of children during the time they are enrolled in the sight-saving class.

Such care may be given by private or school oculists; in addition the oculist, supervisor, teacher and parents should work together to save sight.

Every teacher should be supplied with a record card giving the child's visual acuity, the eye difficulty, the time for the next examination, a statement as to whether or not glasses are prescribed, whether treatment is necessary; whether quiescent conditions are likely to become acute, and the amount of eye work the child is able to undertake.

The sight-saving class teacher must have a considerable knowledge of the eye conditions recorded in order to give the child the full advantage afforded by the class. If she does not understand just what progressive myopia may mean, she will not be able to appreciate why a child suffering from this difficulty should always work with his desk at an angle; or why he should not be permitted to join in such gymnastic exercises as are likely to cause an increase of his trouble. She will be similarly unable to appreciate the fact that an albino child cannot work in comfort with the same amount of light as may prove beneficial to a child with corneal scars or other static conditions. Only through an understanding of the ocular difficulties from which the child is suffering, gained through the closest co-operation with the oculist and by intensive study on her part, can the teacher hope to achieve the highest aim of the work that she is undertaking. Such knowledge is of course for the purpose of enabling her to co-operate more closely with the oculist and never for diagnosis or treatment.

Educational

LOCAL:

In cities having a sufficient number of sight-saving classes to warrant it, a supervisor should be appointed to take charge of the

work. In places where the number of classes does not justify such an expenditure, one supervisor may serve all types of special classes. There is, however, a distinct advantage in having special supervisors, since the work of these classes differs materially from all other lines of specialized education. The duties of such supervisors are manifold. They should be continually looking for children requiring this type of education and getting them to attend sight-saving classes. They must also establish new classes as they become necessary, select and equip classrooms, assist sight-saving class teachers in solving pedagogic and ocular problems and, in general, undertake the many adjustments necessary to assure the best results. Such a supervisor should have broad training and experience. Good supervisors do not stop with the work of the sight-saving classes; they realize that sight-saving is a problem of educating the community and they seek to use their knowledge in helping to make every regular class so well guided and guarded in the care of eyes that the number of sight-saving classes may eventually be reduced. Many times the special supervisor may make an entire community more conscious of the value of good eyesight.

Although supervisors must have as thorough a knowledge of eye conditions as is possible for the lay expert, they must necessarily depend upon the oculist for diagnoses and treatment; hence their fundamental training and experience should be educational rather than medical.

It has been proved that adequate supervision tends to reduce rather than to increase the cost of maintaining sight-saving classes.

STATE:

The responsibility for educational supervision is divided between the state and local authorities. This is especially true in states where sight-saving classes are subsidized from state funds. In this event the state naturally assumes the greater share of the responsibility for the correct development of the work. In Ohio, where sight-saving classes are given a rather substantial subsidy, the state department of education provides special part-time supervisors for the various classes throughout the state, except in cities where there is full-time supervision. Each class is visited at least five times during the school year by these special supervisors, and more often if unex-

pected difficulties make this necessary. The supervisors have frequent correspondence with the teachers, and may give advice in this manner which will obviate the necessity for a visit. The special supervisor acts with the local superintendent in the same capacity as would a local full-time supervisor, and should have frequent conferences with him concerning the success or failure of the local work. She also gives assistance to the superintendent in the preparation of the annual budget required by the state department of education.

All supervisors, whether city or part-time, are directly responsible to the state director of special classes for the maintenance of requirements made standard by the state.

Supervisors, both state and local, make the opportunity to speak to all teachers in the building, explaining the problems of the special class teacher and thereby securing the complete co-operation of the entire teaching corps. Opportunities are likewise sought to hold conferences with groups of principals, to the end that they may be constantly on the watch for suspicious eye cases and become aware of the obligation which is theirs to provide good working conditions for the children who have normal sight. Valuable contacts are gained through meeting with school and city nurses and other health groups.

Classes in Smaller Communities

There are all over the United States, children with serious eye difficulties living in communities too small to support sight-saving classes. There are various ways of meeting such conditions: 1. The consolidated school may, in some instances, make the establishment of a class possible. 2. Children in communities near to cities having such classes may attend them. 3. Children needing the advantages of special education may be boarded in cities having these advantages to offer. 4. The sight-saving center, so placed geographically that it will serve a county, has been found practical. This makes it possible for children who are boarded to go home every week-end, and in many instances bus or traction lines make daily transportation possible. 5. In a county where transportation facilities are extremely poor, it might be possible to make arrangements to establish a class in the town where the county children's home is located. This would provide the necessary boarding facilities and supervision after school hours. Parents financially able

could pay for maintenance while the county would provide for indigent children.

Possibility of Mixed Classes

In certain smaller cities not enough children will be found to justify the establishment of a special class devoted entirely to sight saving. There may be in the city, however, enough children with physical defects to warrant the establishment of a class which may include all such children; for example, such a class of ten physically defective children may be made up as follows: children with eye defects, 4; hard of hearing, 2; cripples, 4. It is imperative, of course, that the room should be correctly equipped for conserving vision. The teacher in charge would of necessity have to become skilled in such special methods as are necessary for the proper teaching of these different groups.

It is to be assumed that this type of class would be made available only when the special groupings could not be made.

The County Class

States that have a law making it possible to board children in cities having classes, find the law is of comparatively little value, because of parental objection to the child's being away from home. The opposition is found more often when the vision is such that the child can attend the regular class, the parents in many instances not seeming to recognize the cost to already overtaxed eyes. Less difficulty is experienced in persuading parents to permit a child to attend a school located within the county limits.

Much co-operation is needed when a county class is anticipated. The first difficulty of finding the isolated case and getting a proper refraction is a serious one. More accurate enumeration of handicapped children will help to bring out the cases with visual defects.

Many states have a director of child accounting, whose duty is to administer the laws governing school attendance. He should be urged to provide in each community enumeration forms which have space for data on the number of children having poor sight.

A state provision for the examination of the eyes of all school children, faithfully carried out, would result in discovering the large majority of cases needing help.

The county health department and the county superintendent of

schools usually have available valuable records. The health department is often willing to make the initial survey. Teachers gladly add their efforts to induce parents to have examinations made.

The county having no oculist presents another problem. It is feasible to ask the state department of health to join with the local health group in working out a county clinic, similar to those provided in many states for crippled children and those of pre-school age. In this event, professional service of a high order is assured. Some local club is always willing to provide transportation to and from such clinic.

It may be well to describe somewhat in detail one county class which has been established and which meets a real need in Ottawa County, Ohio.* The map on page 15 shows the general conditions under which this class was formed. It was established at Oak Harbor, a town with two thousand population, in preference to placing it in Port Clinton, the county seat, which has four thousand population, because geographically and from the transportation standpoint, Oak Harbor is more nearly the center of the county. Other conditions were also taken into consideration:

1. Oak Harbor schools are a part of the county school system, while Port Clinton is a special district. Since the majority of the children to be served are from the county, it seemed wise to keep the school under county jurisdiction.
2. The majority of the children live in the Oak Harbor district and west of it.
3. The Oak Harbor grades are housed in one building, while the Port Clinton grades are housed in three buildings.
4. The Oak Harbor Board of Education was not only willing but glad to have the class.

The children in this class are the product of American population, not of foreign or industrial conditions.

The attendance compares favorably with that of the regular classroom. The children have been weighed regularly and have continued to gain weight.

Because a number of children had to be transported, it seemed wise to reduce the expense by hiring one man to bring a group, in what is known as the "special bus." (This automobile also

* The material on the Ottawa County Class was prepared by Alice Squires, County Nurse, Ottawa Co., Ohio, who did all the preliminary work for establishing this new type of sight-saving class. See page 15.

brings some children to the class for the deaf which is operated on the same plan.) The arrangement was made to accommodate the children who live at La Carne where there is no other means of transportation. The children from Gypsum and Port Clinton ride in this bus, first, to lessen the total cost, since the expense would be almost as great to transport the La Carne children as it would be to transport both the La Carne and Port Clinton children, and because the interurban schedule was changed so that the children would need to leave home too early in the morning. A boy at Marblehead, which is the most distant point, leaves home at seven A. M.

The number of pupils in the grades of the Ottawa County class is as follows:

1st grade—1	3rd grade—1	5th grade—3
2nd “ —2	4th “ —1	6th “ —1
	8th grade—1	

The teacher has an assistant who works for four hours each day. She helps the children in the preparation of their lessons by reading their assignments and preparing special maps and other material with which they can work.

Rural Children

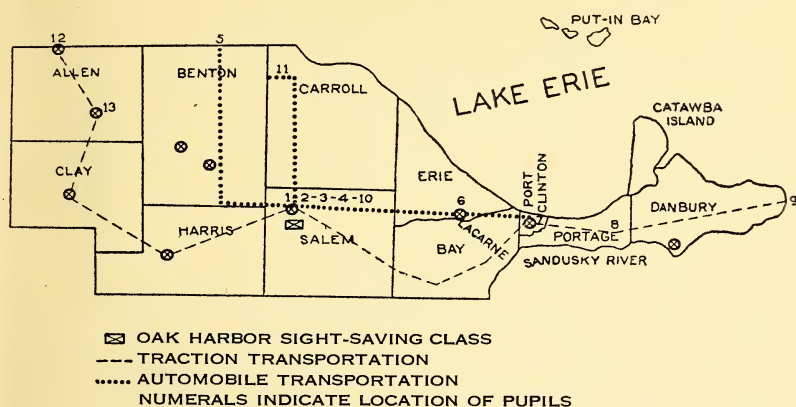
Rural children for whom none of the suggested arrangements can be made may derive some benefit from the large type books used in sight-saving classes. In one state, the legislature has appropriated a sum of money for a lending library of such books. The teacher of these children should make every effort to become as fully acquainted as possible with the proper educational methods of saving sight.*

This does not approximate the ideal; it is merely better than the possibility of having the child increase his eye handicap by the use of small type, or in other ways which can be avoided by a teacher who has an understanding of right methods.

A state supervisor of sight-saving classes could assist individual teachers in meeting the problems of the child with seriously defective vision who cannot attend a special class.

* Material which will be of some assistance to any teacher having in charge one or more children with seriously defective vision will be sent on application to the National Committee for the Prevention of Blindness, 370 Seventh Ave., New York, N. Y.

Sight-Saving Class for a Rural Community—Ottawa County, Ohio*



Populations:

Ottawa County, approximately 22,000
 Port Clinton, approximately 4,000
 Oak Harbor, approximately 2,000

Pupils 1, 2, 3, 4 and 10 are residents of Oak Harbor.

Pupil 5 travels twelve miles each way by automobile with high school students attending Oak Harbor School.

Pupil 6 travels by local school bus to La Carne, then takes special school auto on into Oak Harbor School (ten miles each way).

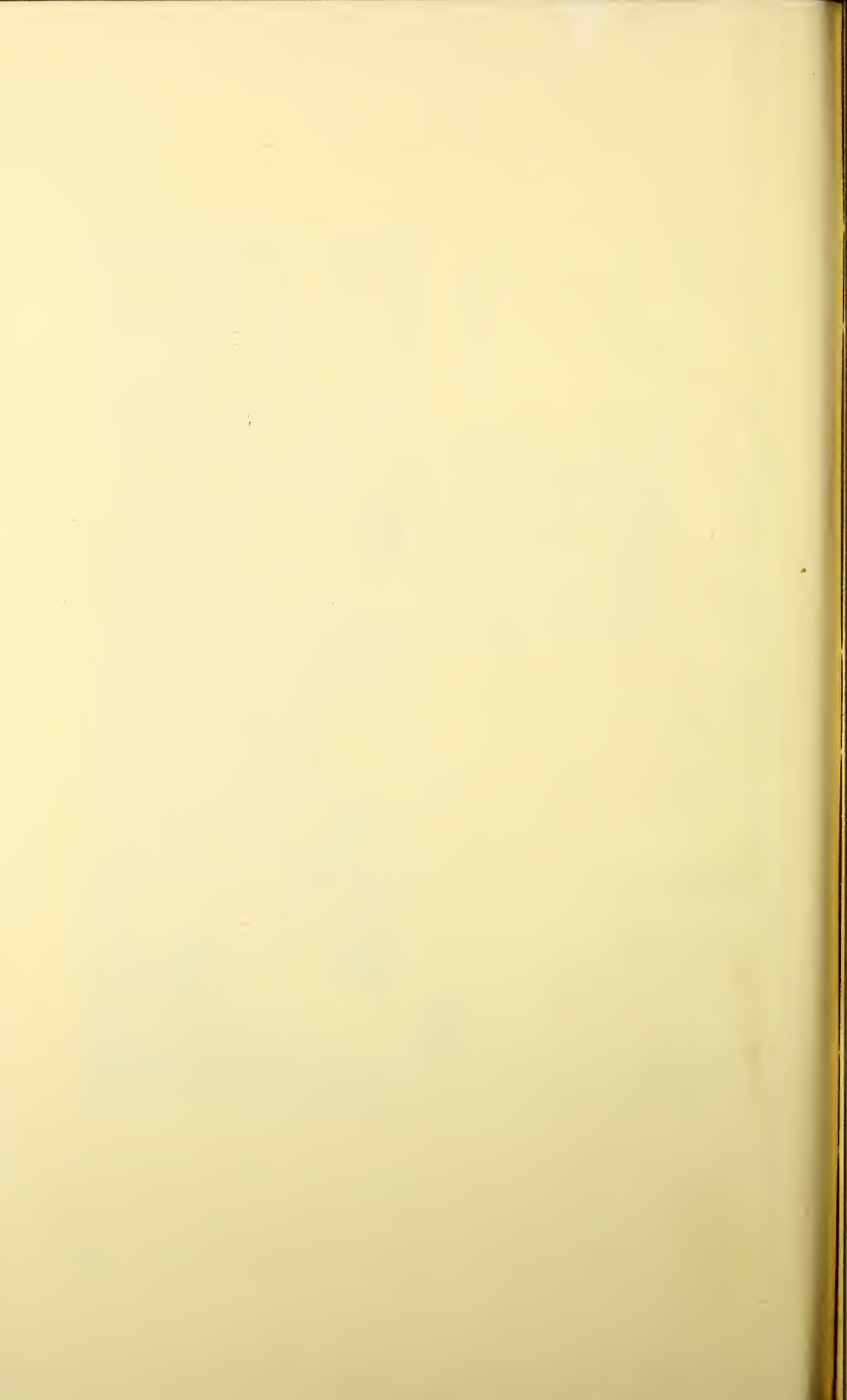
Pupil 7 travels by special school bus, 12 miles each way. This pupil traveled by traction last year.

Pupil 8 travels by individual auto five miles to Pt. Clinton, then takes special school automobile to Oak Harbor in the morning and returns by traction at night because of car schedule.

Pupil 9 travels 22 miles by traction morning and afternoon. The Gypsum and Pt. Clinton children are traveling by auto, first, because the car schedule was changed so that they had to leave home too early; second, because one sight-saving class student and two deaf students live at La Carne where there is no way except by auto, so that the total cost is lowered by including the Pt. Clinton and Gypsum children.

Pupils 11, 12 and 13 are children who should attend the sight-saving class, but have so far refused to do so.

* This map is furnished through the courtesy of Miss Alice Squires.



Hygiene has been given by the Senior Teachers College of Western Reserve University and the Cleveland School of Education. The training course for workers with the blind given for several years past at Harvard University, has included some work for sight-saving class teachers.

Superintendents who contemplate the establishment of sight-saving classes usually select good teachers who have had at least two years of successful experience in grade teaching and arrange for them to attend classes for specialized training.* A longer experience is desirable. Such superintendents are then more assured of having teachers familiar with the local situation and so trained that they may assume the responsibility of establishing and conducting successful classes.

In other instances, a superintendent establishing his first sight-saving class prefers to have a teacher who has already been successful in this specialized work. However, at the present time the supply of adequately trained teachers is far below the demand, hence superintendents contemplating the establishment of sight-saving classes should encourage teachers from their own corps to take special training.

Methods of Conducting Sight-Saving Classes

In general, two methods of conducting sight-saving classes have been tried out in different localities with more or less successful results: 1. Co-operation. By this plan pupils take such part of their work as does not involve close use of the eyes with regular classes. 2. Segregation for all educational work.

The large majority of classes throughout the country are organized on the co-operation plan. As experience in the work gives greater opportunities for drawing possible conclusions, it would appear that if the sight-saving class child is to be a social asset, he must be socially educated. To segregate him may emphasize his handicap by depriving him of contact with normally sighted children of his own mental age and ability.

If the co-operation plan is used, the best results will be obtained through as close co-ordination of the sight-saving class with the

*In considering this matter many superintendents have found that experience gained in a multi-grade rural school is especially valuable.

regular grade as conditions will permit. This arrangement will require the most careful attention to program making on the part of both the special teacher and the grade teacher in order to avoid duplication and confusion.*

In any event, the emphasis should be placed on as much oral work as possible. The mechanics of reading, writing and arithmetic require close eye work, and should be most carefully supervised. As much of the written work as possible should be done on the black-board, emphasizing large muscular movements in place of cramped finger exercises.

The same difficulties that arise from attempting to educate blind children and children with defective vision in a school for the blind, will be found in attempting to educate these two groups in the same special class in the public schools. Any endeavor to give them the same specialized education, will be to the detriment of both groups.

Responsibilities of Regular Grade Teachers

Whenever the co-operation plan is followed the regular teacher having sight-saving class pupils under her instruction must work closely with the special teacher and have some knowledge of her problems. Believing that an understanding of conditions will result in the desired co-operation, the State Department of Education of Ohio sends out the following announcement to regular teachers in a building where a new sight-saving center has been established:

To Teachers Who Have Pupils from Sight-Saving Classes Reciting in Their Classes:

Pupils in sight-saving classes are placed in special classes because of some eye trouble which makes it inadvisable, or impossible in some cases, to do school work in the same way or with the same tools as do children in regular classrooms. The teacher of the special class will be glad to confer with any classroom teacher as to the eye difficulty of the pupils who may be reciting in the class.

A sight-saving class pupil should:

1. Take the same part in oral recitations as does the child with normal vision.
2. Do no written work in the classroom unless permission has

* See *Methods of Teaching Sight-Saving Classes*, pp. 11-14.

been given by the special teacher for the child to write from dictation, using sight-saving tools.

3. Never face the light, but work with the light coming over the left shoulder or from the back.
4. Never try to read from the blackboard unless standing directly in front of the board and at a proper distance.
5. Conduct himself in the same manner as do children of normal sight in the classroom.
6. Enter and leave classrooms with the least possible disturbance.
7. Give strict attention in the classroom.
8. Be kept informed of any changes in program, assignments, etc.
9. Be appreciative and helpful in his attitude toward teachers and pupils in his classroom.

Co-operation with the Home

Home conditions greatly influence the welfare of children in the sight-saving class. If parents understand what the special classes are trying to accomplish especially in saving sight, they will be more ready to co-operate. Reciprocal visits do much to establish friendly relationships.

A teacher can hardly be expected to understand the environment of the child out of school hours unless she visits the home. Parents will have a much better understanding of what the educational system is trying to accomplish if they see the child actually at work.

The Visiting Teacher

When the number of sight-saving classes in a community is large enough to justify the expenditure, it is desirable to have a special visiting teacher. The visiting teacher of sight-saving classes must have the fundamental training of any visiting teacher. In addition, she must have an understanding of the principles and problems of the sight-saving class in order to be able to interpret them in the home. Her visits do not take the place of the visits of the teacher of the class. They are more or less for the purpose of making arrangements and adjustments; whereas the visit of the class teacher is for gaining a better understanding of her pupil's problems through an appreciation of his home life. Where social conditions exist in the home that are to the detriment of the child in the sight-saving class, the visiting teacher or, in case there is none, the teacher of the sight-

saving class should make every effort to bring such to the attention of a reliable social agency.*

Size of Classes

The number of children in a sight-saving class is necessarily small because of two factors: The number of grades to be accommodated, and the individual educational problems arising from various eye conditions.

Where not more than four grades are represented, a teacher may successfully care for from ten to sixteen children. It is difficult for any teacher to carry more than four grades. In addition to the regular teaching requirements she has the responsibility of daily and hourly remembering that each child is suffering from eye difficulties which must be given constant and thorough care.

In small communities where there are few children requiring the advantages of a sight-saving class, the teacher has a very difficult task because of the many grades likely to be represented. The class should be correspondingly small. In larger communities where the number of children warrants more than one class, it is wise to place the children in groups representing three or four grades, even if this arrangement necessitates considerable traveling on the part of some of them.

Length of School Day

In some cities it has been found advisable to lengthen somewhat the usual school day, either by beginning earlier or by shortening the noon hour. This is done in order that the children may have no home work to prepare, that they may have periods in which to rest their eyes, and that the extra time often needed by sight-saving class children to cover a given amount of work may be available.

Costs

The costs of a sight-saving class may vary according to local conditions. It is therefore impossible to give a detailed budget which would be satisfactory to different communities. In general, it may be said that a school system would be justified in establishing

* A comprehensive statement of the duties of a visiting teacher in sight-saving work has been prepared by the Department of Sight Saving and Braille Classes in the Cleveland Public Schools.

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EXCELLENT TYPE OF DESK FOR USE IN SIGHT-SAVING CLASSES*

* Address of manufacturer may be secured upon application to the National Committee for the Prevention of Blindness.



EXCELLENT TYPE OF DESK FOR USE IN SIGHT-SAVING CLASSES*

*Address of manufacturer may be secured upon application to the National Committee for the Prevention of Blindness.



a sight-saving class with \$3,000 available for the first year's work. This would be divided somewhat as follows:

Teacher's salary (approximately).....	\$2,000.00
Furniture and equipment (including movable desks, children's lunch table).....	250.00
Clear type text books.....	300.00
Maps, globes, typewriter, window-shades.....	200.00
Incidental expenses, including possible carfare, lunches, etc.	250.00

It is assumed in this estimate of costs that the lighting, the cost of the teacher's desk, and the decoration of the room, are to be charged against general maintenance.

The budget for succeeding years may be somewhat less than the above, although in all probability the furniture and equipment will have to be added to from time to time in the early stages of the work.

Placement in Sight-Saving Classes

Differentiated Classes

There is a tendency to further specialized education in sight-saving classes as evidenced by the establishment of classes for myopes separate from classes for children with other serious eye conditions. Myopia (nearsightedness) may be actually or potentially progressive. Where pathological conditions exist, it may be essential that the child undertake no close eye work and that instruction be entirely oral.

Children suffering from static eye conditions may do a considerable amount of close eye work without harm to their eyes and may be able to read smaller type than the present accepted 24 point. In such cases it is not primarily the question of saving sight as with the myope but rather of making education possible through specialized methods. This arrangement permits a larger group of children to be cared for in a class composed solely of static cases than would be otherwise possible.

The Problem of the Mentally Subnormal Child Suffering from Defective Vision

The placement of a child having more than one handicap should be determined by the greater handicap. Mental deficiency is unquestionably more serious than the physical handicap of defective vision; hence, a child suffering from both should undoubtedly be placed in a

class for the mentally subnormal and there be given all advantages possible for saving sight. To place mentally defective children in sight-saving classes is as unfair to them as it is to their classmates and to the teachers. Not only are the methods of education different in the two types of classes, but, whereas the educational segregation of the mentally subnormal child may be desirable, it is considered disadvantageous to the child with defective vision as his only handicap.

In large communities where there may be a sufficient number of children suffering from both these defects a special class may be established for mentally subnormal children having defective vision.

Communicable Eye Diseases

The problem of dealing with communicable eye diseases must be solved in the same manner in which the problem of any other communicable disease is treated—exclusion of the child from school. However, where, in any community, there are enough children suffering from a communicable eye disease to warrant the establishment of a special class for them, the problem may be solved in this manner.

Financial Support of Sight-Saving Classes

Since the state in making education compulsory includes children with seriously defective vision, it should assist in providing a type of instruction which these children can assimilate. Ohio was the first state to recognize its responsibility in this particular.

In 1913 the Legislature passed a bill allowing \$250 a year for each child coming under the provisions of this specialized education; the amount has since been considerably increased. The 1919 session of the Minnesota Legislature passed a similar bill allowing \$200 per capita, which is now increased to \$250. Massachusetts assumed its responsibility by appropriating the sum of \$10,000 annually, now increased to \$15,000, for the establishment and use of sight-saving classes. New York State pays half of the teacher's salary, provided this does not exceed \$1,000.*

Any state furnishing money for the promotion of these classes should reserve to itself some form of regulation, neither paternalistic nor oppressive, but rather in the nature of a partnership with the

* See Appendix A for a summary of state laws and regulations.

community, in which each will bear its just share of responsibility. It would seem unwise to write detailed requirements into any law providing for sight-saving classes. Authority to set standards should be vested in the state department of education.

In many instances it is necessary for the local community to demonstrate the necessity for these classes before the state is willing to assume any responsibility in regard to their financial support.

Early legislation provided for the children in these classes as blind children, a term unfair to both types of children, since it tended to confuse two different methods of education. Later legislative action makes provision for them as partially sighted children, or includes them under provisions made for the education of physically handicapped children.

An additional annual compensation of from \$100 to \$300 is usually paid to the sight-saving class teacher who has had special training.

The Sight-Saving Classroom and its Equipment*

Selection of Room

Since sight-saving classes are not required in all school buildings, a centrally located building should be selected convenient to car lines. If a modern building is available with up-to-date lighting conditions and equipment, the expense of establishing the class will be considerably lowered.

In selecting a room, two essentials must be considered: Ample space and a maximum of light without glare.† The ideal classroom for children with defective vision is a large, well-ventilated room providing ample space for the children to move about and to place their seats and desks in a position enabling them to secure the best light.

Recent experimental tests carried on at Peabody College over an extended period indicate that east or west exposures prove most satisfactory since they combine a maximum of light with a minimum of

* The National Committee for the Prevention of Blindness cannot advertise any article, but will on request give addresses for obtaining material that has been found satisfactory in sight-saving classes.

† *The Code of Lighting School Buildings*, published by the Illuminating Engineering Society, 29 West 39th St., New York; *Lighting the School Room*, published by the National Committee for the Prevention of Blindness, 370 7th Ave., New York; and *School Lighting as a Factor in Conserving Light*, published by the Eyesight Conservation Council of America, Times Building, Times Square, New York.

glare, two very important factors in any classroom. A northeast exposure will give the advantage of the morning sun and a steady, well diffused north light very comforting to sick eyes.

In any event, southern exposures should be avoided, since the constantly changing light may be very trying to these children and too much of the teacher's attention must be given to shade adjustment.

Unilateral lighting is recommended, but if this is not available windows should be on adjacent sides of the room to the left and rear of the pupils.

Glass window space should equal at least one-fifth, preferably one-fourth of the floor area. Windows should be at least three feet from the floor and the glass area should reach within six inches of the ceiling, since the best light comes from above. It is important that there shall be no glare due to reflected light from adjacent buildings.

Light buff walls, and white or light cream ceilings in flat finish will give good reflective values without causing glare.* Medium colored woodwork in dull finish will be found most satisfactory.

Window Shades

The selection of window shades is important. Their purpose is to control natural illumination by securing reasonable uniformity, eliminating glare and diffusing direct sunlight. The best results may be obtained in one of two ways. Each window may be equipped with two shades operated on double rollers placed near the center, thus permitting them to be raised or lowered from the middle without interfering with ventilation. In this case, care must be taken in adjustment so that there will be no space between the two rollers to permit a shaft of sunlight, very trying to the eyes, to enter. A single shade may be used that can be adjusted to any part of the window. Shades must be wide enough so that there will be no shafts of light from either side. Shades of a buff or grayish color in a dull-finished translucent material will transmit and diffuse light. Excellent devices of both these types of shades are now obtainable.

Artificial Light

Artificial light is as important as natural light. It is essential that

* A starch finish on ceilings has been found to produce a dull surface and to make cleaning a simple matter.



THE SILENT READING LESSON. NOTE WRITING ON THE BLACKBOARDS.*

* Picture secured from an Ohio sight-saving class.



every sight-saving classroom be equipped with artificial light; that the teacher know when to use it and that she actually does use it to supplement or to take the place of natural light. The chief points to be considered, as in the case of natural lighting, are adequate light and avoidance of glare. To these essentials of natural lighting must be added a consideration of maintenance and efficiency.

Experience in sight-saving classes indicates as most satisfactory, a system of artificial lighting using totally enclosing translucent globes of low brilliance, especially where there is a great deal of dust and smoke.

Blackboards

Good slate board has proved most satisfactory. Since children in sight-saving classes do such a large part of their eye work at the blackboard, the space should be as liberal as possible. Blackboards should be so placed as to avoid glare.

Equipment for Serving Hot Lunches

In school buildings where there are no arrangements for serving a hot lunch, sight-saving classrooms should be equipped with an electric plate, a sink with running water and a supply of cooking utensils, a list of which is given in Appendix B.

Physical Equipment

SEATS AND DESKS: Seats that are adjustable and of correct size and desks that will lift to an angle will make it possible for the children to be comfortable at their work. They will also help to conserve sight through good posture and avoidance of congestion of the eyes which is often caused, especially in cases of progressive nearsightedness, by bending over a flat desk. Care should be taken to see that desks, as well as all other equipment for a sight-saving class, are ordered in dull finish.

TABLES AND CHAIRS: One table about ten feet by three feet, or two smaller tables with chairs for general use and for serving the lunch family style, should be included. For classes with small children, one kindergarten table with chairs is desirable. All tables should be ordered in dull finish, with drawers on both sides.

CUPBOARDS: Adequate cupboard space is of unusual importance in a sight-saving classroom since much of the material is of a larger

size than that used in the regular grades. Additional space should be provided to care for cooking utensils and supplies, if there is no lunch room in the building.

SAND TABLE: A sand table has been found so useful in sight-saving classes that in many places it has come to be included as a part of the essential equipment.

BOOKS:* Great care must be taken in the selection of all material used for such reading as may be done by the pupil.

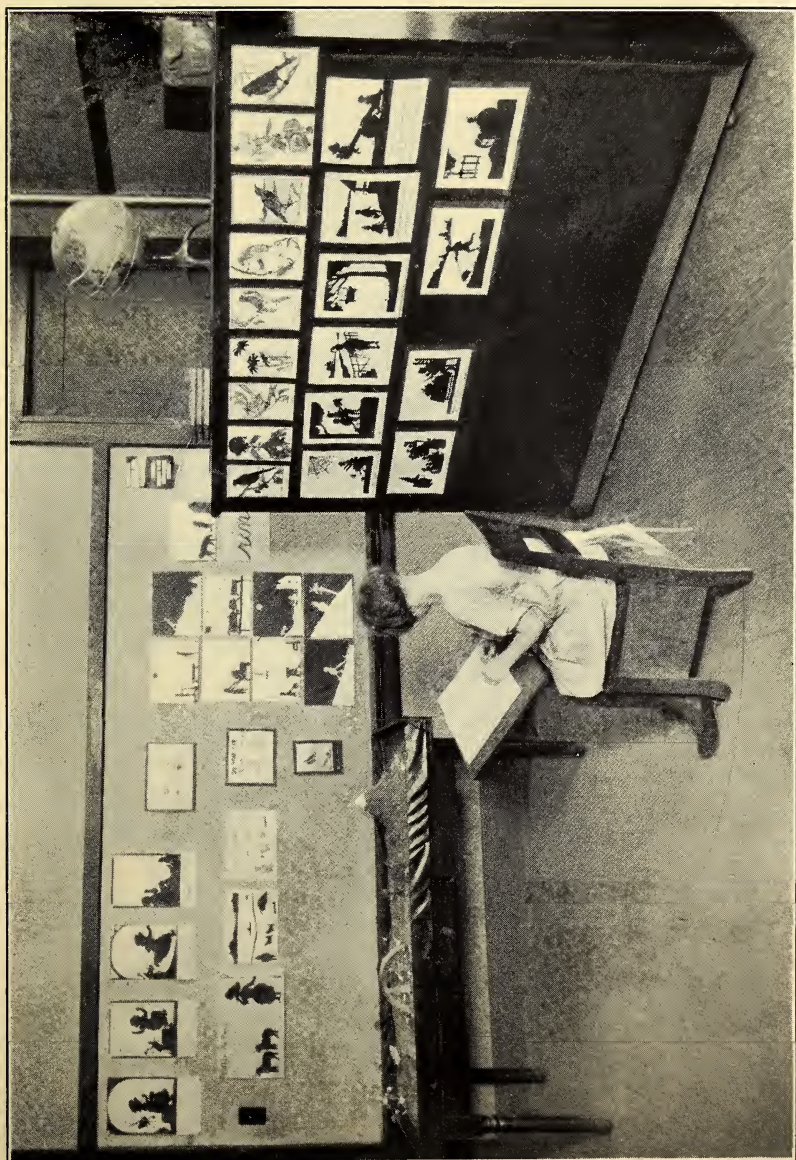
Experiments with various kinds and sizes of type appear to indicate that a 24-point clear type is best for the majority of children suffering from defective vision. The printing is done in black ink on dull finished, cream colored paper. These books are more expensive than the ordinary textbook partly because of the limited demand. As the number of sight-saving classes increases, the cost of texts will probably be lower and a larger variety will doubtless be printed. This will curtail the work of the special teacher in preparing material and permit her to teach a larger number of children.

BOOK RACKS: Since the clear type books are much larger than ordinary texts, they are somewhat awkward for the smaller children to handle. Adjustable racks are often furnished to hold them in correct position.

TYPEWRITING EQUIPMENT: There should be at least one typewriter of standard make in every sight-saving class in which there are children above the fourth grade. Whenever possible, typewriters in dull finish should be provided, thus preventing glare from reflected light. Typewriters should be equipped with a silence pad and blank keys or shields.

A regular typewriter table should be provided. A copyholder which will place the copy directly in front of the pupil is essential. This should never be attached to the typewriter. Music racks may be used to advantage and excellent copy holders may be made in the manual training department. A good standard book on typewriting should be provided for the teacher. There are now on the market typewriters in double case bulletin type. If funds will permit, one should be provided for the class.

* List of books in 24 point type may be obtained from the Clear Type Publishing Co., 36 Elston Road, Montclair, New Jersey; Houghton Mifflin Co., Boston, Mass.; Doubleday Page & Co., Garden City, Long Island, New York.; Blackie & Son, London, England.; Oxford University Press, London, England.



EXCELLENT USE OF SAND TABLES AND POSTERS*
* Picture secured from an Ohio sight-saving class.



MAPS, GLOBES, CHARTS:* Maps furnished for sight-saving classes should be in strong outline and without detail. Several firms are now manufacturing excellent outline maps; others will be glad to omit names and other details if requested to do so.

Reading, phonetic, and arithmetic charts used in the primary grades are as a rule sufficiently clear for sight-saving class children, provided they are permitted to go close enough to be sure of seeing them without eyestrain.

PAPER: A slightly rough unglazed manila paper in sheets 9 x 12 inches has been found practical. If the paper is ruled, green lines have usually been found to be more acceptable than black. Lines, if used, should be about one inch apart.

PENCILS, CRAYON: Pencils with soft, thick, heavy lead making a broad clear line are best adapted for the use of these children. A large size pencil sharpener is necessary for these pencils.

Crayon used in the ordinary classroom is too hard. Any soft white chalk which makes a broad, even line is satisfactory.

PENS, INK: Pens that will make a broad, heavy, even line should be provided for written work. The school ink is often found too thin and it may be mixed with India ink provided the two do not neutralize each other.

Material for Motivated Hand Work

Only such hand work is desirable as can be correlated with the regular work of the class. Clay, plasticine, material for sand-table use, and other forms of hand work that may be motivated, should be provided for the teacher. This enables her to satisfy the desire of the child in the sight-saving class for this type of work and to stimulate his creative instinct.

It is sometimes desirable to have a small sum of money which may be spent by the teacher for materials not usually included in supplies furnished regular classes. These materials are for such forms of hand work as are approved for sight-saving classes.

* For a detailed account of materials used in the sight-saving class see: *Methods of Teaching Sight-Saving Classes*, Estella Lawes; *Sight-Saving Classes, Cleveland Public Schools*, Helen J. Coffin and Olive S. Peck.

Returning Sight-Saving Class Pupils to the Regular Grade

With the special ocular and general physical care accorded children in sight-saving classes, it is not infrequent that the improvement in eye condition is great enough to enable the child to return to the regular grade. Percentages of such returns differ in the various communities; no estimates of any value can be reached under the present differences in schedules for entrance to these classes.

The fact that a certain proportion, however small, may be returned with safety to continue regular work would seem sufficient warrant for keeping children up to academic standards and for using the non-segregation plan of education.

Transportation

In many instances it is necessary for children to travel some distance to reach the sight-saving class. In the case of young children, an older brother or sister may be transferred from his own district to the same school in order to accompany the child. Should no member of the child's family be able to do this, arrangements may be made by the parents in co-operation with the teacher for an older boy or girl in the neighborhood to accompany the child.

In some cities, carfare for the child and his guide, and the amount for guide service, where this is necessary, are paid by the board of education, in others, the board assumes only the responsibility for the carfare.

Sight-Saving Classes in School Systems*

What are Sight-Saving Classes?

Classes established in public and private school systems for the education of children who, because of seriously defective vision, cannot be profitably educated in the regular grade.

Why Should not such Children be Educated in Schools and Classes for the Blind?

The two systems of education are different: for blind children,

* Reprinted from *Methods of Teaching Sight-saving Classes*, Estella Lawes. Published by the National Committee for the Prevention of Blindness, 1926.

the chief avenue of educational approach is tactile; for sighted children, it is visual.

How are Sight-Saving Classes Valuable?

They are valuable to:

1. *Handicapped children:* by giving educational advantages to children with seriously defective vision while saving their sight.
2. *Normally sighted children:* by relieving the grade teacher of the necessity for devoting a disproportionate amount of time to handicapped children.
3. *The educational system:* by relieving the system of those repeaters who have failed to make their grade because of defective vision.
4. *The state:* by investing in children who will become an asset rather than a liability to the community.

What Children are Candidates for Sight-Saving Classes?

In general children whose vision ranges between 20/200 and 20/70, together with children suffering from progressive eye troubles.

Where may Suggestive Guides be Obtained?

The National Committee for the Prevention of Blindness, 370 Seventh Avenue, New York, will furnish on request tentative guides now used in various cities.

How Much Eye Work are Sight-Saving Class Children Permitted to do?

The amount is determined by the oculist in relation to the eye difficulty from which the child is suffering. Oral instruction is emphasized.

What Proportion of Children Require this Specialized Form of Education?

Limited experience would seem to indicate about one child in every five hundred of the school population.

How Many Children may be Profitably Educated in a Sight-Saving Class?

The number of children depends chiefly upon the number of grades represented. Where there are not more than three grades in a class, sixteen children may be cared for. An increase in the number of grades requires a corresponding decrease in the number of pupils.

What are the Essential Physical Arrangements of a Sight-Saving Classroom?

Adequate lighting, natural and artificial, without glare; dull, matt surface on walls, woodwork, desk tops, blackboards, paper, etc.

What Special Equipment is Necessary?

Movable, adjustable seats, adjustable desks, tables and chairs, typewriter and stands, clear-type books, unglazed paper, educational models, charts, special mats, special globes, adequate cupboards for large size books, paper, etc., equipment for motivated handwork.

What is the Generally Accepted Method of Conducting Sight-Saving Classes?

The work is co-ordinated with that of the regular grade. Work requiring close use of the eyes is done in the special class under the guidance of the special teacher, the use of the eyes being prescribed by an oculist in consultation with the supervisor. Oral work, gymnasium exercises, rote singing, etc., may be taken in the regular grade.

How are Sight-Saving Classes Financed?

Since the state makes education compulsory, it should be responsible for its share of the financial burden. Appropriations should be made for the education of physically handicapped children in accordance with the educational laws of the state. Appropriations may be withheld when standard requirements are not met.

Experience has shown that it is sometimes difficult to obtain financial assistance from the state until the need of sight-saving

classes has been established by the local community. In some instances state subsidies providing for other types of classes may, without special legislation, be extended to communities maintaining sight-saving classes.

How May Further Details and Assistance Regarding Sight-Saving Classes be Obtained?

The National Committee for the Prevention of Blindness, believing that sight-saving classes are among the most important ways of conserving sight and preventing blindness, offers its service, and where necessary, will send a member of its staff experienced in this work to any community for legislative or educational work looking to the establishment of such classes.

APPENDIX A: LEGISLATION

Prepared by

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Prevention of Blindness

The following pages give a summary of the provisions in the state school laws under which sight-saving classes may be organized. In certain states it has seemed best to give the entire law—especially where the law represents fairly well a particular type of legislation.

Types of Legislation

There are three general types of legislation:

a. Providing assistance to classes where the pupils are classified as blind; under this provision those with partial sight or very poor vision are classified for the purpose under the provisions of the law as blind children, although in fact they are not blind. It is in accordance with this classification that state aid is extended to cities supporting such classes in Illinois and Minnesota.

b. Where there is special legislation for children with very defective vision; legislation of this type is in effect in Michigan.

c. Legislation providing state aid for all pupils who have physical defects of such a nature that they cannot take work with profit in the regular school classes; under this general legislation classes may be organized for children with defective vision and also for crippled children and for deaf children. Legislation of this type exists in Connecticut, New York, Pennsylvania, and Wisconsin.

The question as to what type of legislation of the three referred to should be chosen, must be settled by the state, after taking into consideration the general condition of education and the type of classes already organized.

Character and Amount of State Aid

With reference to the character and amount of state aid extended to these classes, there are four general types;

a. A flat sum, per capita, to be distributed to the districts maintaining classes. For example, Minnesota and Ohio; Minnesota pays \$300 for each child enrolled, and Ohio may pay as high as \$375. It is the opinion that both of these amounts are rather

large. In Ohio the full sum is not distributed, the sum being determined at the discretion of the state director of education.

b. The appropriation of a lump sum to the state board of education to be distributed on an equable basis to the various districts maintaining sight-saving classes; an example of this kind is Massachusetts where the state board of education has a sum of \$15,000 for distribution.

c. The reimbursement to districts maintaining such classes for the cost of instruction in excess of instructing the pupils in the regular grades. In this case usually the maximum is set, as for example in Michigan at \$200.

d. A lump sum to be paid as a teacher's quota to districts maintaining such classes, as for example in New York State, a sum equal to one-half the salary paid to each teacher, but not to exceed \$1,000.

Permissive and Mandatory Laws

There are two types of legislation with reference to the organization of these classes:

a. Permissive, which leaves the judgment as to the establishment of such classes to the local board of education.

b. The mandatory type, which requires the district to establish a sight-saving class wherever there is the minimum number of pupils with such defective vision; in general, no state so far has enforced mandatory provisions.

Alabama

General law will permit local administration of special classes for those who are in need of such in any practical phase or type of education.

Arizona

1. No educational law, permissive or mandatory, providing for the establishment of special classes.

2. No regulations under which special classes can be established.

Arkansas

1. No educational law, permissive or mandatory, providing for the establishment of special classes.

2. No regulations under which special classes can be established.

California

Section 1618 of School Law: Separate classes may be provided for (a) the deaf; (b) the blind; (c) crippled children. The school law does not specifically provide for sight-saving classes as such. However, the law has not been so strictly interpreted as to distinguish between pupils who are totally devoid of light and those who have a small percentage of vision. Local authorities determine what pupils should be assigned to the so-called classes for the deaf, classes for the blind, and classes for crippled children. For each class of nine, or fraction of such number, not less than five, attending such classes, the state sets aside one teacher unit.

Special certification is granted by the State Department of Education for teachers of special classes. In most instances local communities have required specially prepared teachers for this work.

Colorado

1. No special law providing for sight-saving classes.
2. Nothing in the law which would prevent the organization of such classes.

Connecticut

Chapter 355 of the Public Acts of 1921: This law encourages special educational provisions for children below standard, physically or mentally, and (1) provides for a state director; (2) that the State Board shall make regulations; (3) ages over four and under 16; (4) any district or combination of two or more districts may provide a class.

The State Board of Education interprets "educational exceptional" children to include children of seriously defective vision who are not blind. A class may be organized for the purpose of caring for all types of exceptional children in one room. No state aid of any type is at present available.

The state has not set up certification requirements for teachers in any type of special class, except those for backward and defective children, the deaf and the blind.

Delaware

1. No provision for sight-saving classes.
2. No state regulations providing for the establishment of special classes.

District of Columbia

Sight-saving classes may be established under Section 11 of Chapter 13 of the Rules of the Board of Education. "Any pupil with serious mental or physical defects may also be segregated in special classes after appropriate examination of such pupil."

Florida

No special law. However, it is believed that classes might be maintained for pupils whose vision is defective, under the provisions of the twelfth paragraph of Section 64 of the school laws, which provides that "Boards of Public Instruction may perform all acts reasonable and necessary for the promotion of the educational interests of the county and the general diffusion of knowledge among the citizens."

Georgia

No law providing for the establishment of special classes. However, classes may be organized under the general law. No state regulations.

Idaho

No state law. Nothing to prohibit school districts from organizing and establishing special classes, making expenditures from school funds.

Illinois

District may establish classes (1) for crippled children; (2) for deaf children.

The law provides that defective vision shall not be considered a crippling factor.

For crippled children the state pays maintenance above average cost not to exceed \$300 per capita.

Districts also may establish classes for deaf and dumb and blind pupils under the act of June 2, 1911, page 141, School Laws.

For deaf children, teachers must have had one year's instruction in methods of teaching the deaf. State pays maintenance above the average cost not to exceed \$110 per capita for deaf, and \$160 per capita for the blind.

All classes and schools are subject to supervision by the Department of Public Instruction.

Indiana

No state law for special classes.

Iowa

No state law for special classes, and no rules and regulations.

Section 4427 of the Code of Iowa, 1924, provides that "children over seven and under 19 years of age who are so deaf or blind as to be unable to obtain an education in the common schools shall be sent to the proper state school therefor, unless exempted, and any person having such a child under his control or custody shall see that such child attends such school during the scholastic year."

Kansas

No state law providing for the establishment of special classes.

Kentucky

Special state law providing for sight-saving classes.

It is to be noted that it does not provide state aid.

1. The board of education of any city in this Commonwealth and the board of education of any county and the board of trustees of any independent graded school district are hereby authorized to provide for the instruction and education of children of proper school age who, by reason of defective eyesight, require special books or special instruction, or both in order profitably and safely to attend the public schools in such city or county or district.

2. The boards of education of such cities, counties, and districts, for the purpose of giving instruction to children having such defective eyesight, are authorized to provide for and direct the teachers in the several schools thereof, as said boards may deem proper, to establish and maintain classes for the instruction and education of such pupils having defective eyesight; and if such classes are so established, the said boards of education of said cities, counties, and districts shall be authorized to purchase and acquire such special equipment and books as may be proper and necessary for the use and instruction of such pupils on account of their defective eyesight; and such special books may be purchased and provided by said boards, or may be recommended to the parents of such children for purchase and for the use of such children, although said books may

not be included in the list of books selected for other children by Text Book Commission, or by board of education, or by board of trustees.

3. Pupils with such defective eyesight, as above mentioned, for whom special books may be provided or recommended, shall not be required to purchase or use the books adopted for general use for the other pupils, unless such books as have been adopted for general use may be used by the pupils with defective eyesight, without injury thereto; and the instruction of such pupils with defective eyesight may be so arranged that instruction can be given to them separately, or in connection with other classes, as may be deemed proper and best.

4. The board of education of any city or of any county or of any district, as hereinbefore mentioned, shall not undertake to provide for the instruction of pupils with defective eyesight and to purchase therefor, except by permission and in pursuance of the advice and authority of the State Superintendent of Public Instruction; and such Superintendent of Public Instruction shall give such advice and permission as he may deem proper for such purposes, and shall prepare and distribute information to the different boards of education of said cities, counties, and districts concerning the improved methods of such instruction, and the qualifications of teachers for such classes; and such Superintendent may require annual reports from such boards as shall have caused classes and instruction to be provided for such pupils; and said Superintendent may designate one or more of his assistants to supervise the classes of instruction of children with defective eyesight, as herein provided for.

5. Any board of education of any city, county, or district, as herein provided for, may collect and expend such funds as may be proper and suitable for such instruction for children of defective eyesight, and for the purchase of equipment and books, as provided for in this act in the same manner as funds are raised and expended for the maintenance of other school activities.

6. Nothing in this act shall be so construed as to annul any law or regulation that may preclude from attendance upon the schools children afflicted with communicable eye diseases.

7. This act shall take effect from and after its passage and approval, as provided by law.

Louisiana

1. No special laws for the establishment of sight-saving classes.
2. Classes may be organized under general school laws.

Maine

1. No special laws providing for special classes.
2. Any town may establish such a system if so desired.

Maryland

1. No law and no regulations.

Massachusetts

Law provides special classes for (1) mentally retarded children; (2) deaf children; (3) children with defective vision; Chapter 69, General Laws.

These classes for defective vision are under the supervision of the Division for the Blind of the State Department of Education.

“Under the direction of the Director, there may be expended annually certain sums, as the General Court (State Legislature) may appropriate to provide Sight-Saving Classes for children certified by any reputable oculist as fit subjects for instruction therein. With the approval of the Director, local school committees may organize and conduct such classes.”

Under the provisions of this act, the Division of the Blind reimburses the city maintaining such a class in the amount of \$500 annually for each class. The first year a class is started, the Division provides them with an initial equipment and books to the amount of \$250. The appropriation for the current year is \$14,000.

Michigan

Laws providing special classes for crippled children, for the deaf, and for children with defective vision.

Under the law, the Board of Education of any school district may, upon the petition of parents or guardians of five or more resident children between the ages of three and twenty years who, by reason of being blind or having defective vision, or who by reason of being deaf or having defective hearing, cannot profitably or safely be educated with the other classes in the public schools of such district, establish and maintain within the limits of the district, one or more day schools or classes for the instruction of such children.

Courses of study, adequacy of methods of instruction, qualifications of teachers, the conditions under which teachers are employed,

and the necessary equipment and any special services for such children for any school year must comply with the requirements prescribed by the superintendent of public instruction.

"The total amount per pupil paid to any one school district for the purpose herein provided shall not exceed the difference between the average per capita cost of instruction and equipment for the other children in the first eight grades of said school district and the average per capita cost required to pay teachers' wages and the cost of the necessary special school equipment to educate the children enrolled in the classes established for those children who may be included within the provisions of this act. In no case shall the amount paid exceed *two hundred dollars* for each child instructed in said school district during the school year, and a part of such sum proportionate to the time of instruction of any pupil so instructed less than the number of months prescribed for the school district for the year."

Minnesota

Sight-saving classes are organized under Chapter 188 of the School Law, which provides for classes for the blind. The minimum number of children required for a class is five. It is mandatory upon school districts to establish classes if parents or guardians of eight blind children ask for a class. Under this act any child having such defective vision that he cannot pursue the regular school work with profit is enrolled in the special class.

The state pays to the local district \$300 for each blind child enrolled in the day school classes. This is distributed according to pro rata attendance. This is over and above the amount of state aid given to each district on behalf of every child enrolled. This is not a definite per capita distribution, but depends upon the amount of income from school lands and other properties held in trust for the schools by the state. It usually amounts to something like \$6 per pupil.

Minnesota also has special classes for children with defective speech, for those who are mentally subnormal, for the deaf, and for the crippled.

The rules of the State Board of Education require that special class teachers be qualified to teach regular grade work in the State of Minnesota and in addition have taken at least six quarter credits of special training for the kind of teaching they are to do. They

must also have had at least two years of successful teaching experience. This qualifies for a one-year special certificate. For the five-year renewal six credits of additional training must be taken. No certificates are renewed for more than five years at a time.

Sight-saving class teachers have not been held strictly to the requirement of six credits of special training for the one-year certificate because of the fact that no college in Minnesota or near it has been giving a definite course in sight-saving work. Therefore such certificates are renewed from year to year on recommendation of the supervisor on a basis of individual study on the part of the teacher under the direction of the supervisor.

Mississippi

1. No law for special classes.
2. Nothing in the law that will prevent a school from establishing a special class for sight saving.

Missouri

Section 11147 of the School Law provides for the establishment of classes for (1) the blind; (2) the deaf; (3) the crippled; (4) the feeble-minded. Classes must consist of ten or more children, and instruction must be provided for each special class. Transportation must be provided.

Instruction must be adapted to varying physical and mental handicaps, and must be of elementary grades. The instruction must be provided under the regulations of the State Department of Education.

Each Board must ascertain annually the number of children in a district who belong to any type.

Section 11148. Special classes may be organized by a union of two or more districts; classes to be conducted by one district, contracts made by others. Such classes may be organized only when pupils cannot be provided for in state institutions.

Section 11149. Provides that the State Superintendent shall inspect and approve all special classes, and that each district shall receive state aid to the amount of \$750 for each teacher; also, teachers must be especially trained for the work, and state aid is not to exceed two-thirds of the salary paid to the teacher.

The State Superintendent shall require reports from each district maintaining special classes and may set aside state school funds in

August for the purpose of reimbursing districts maintaining classes.

Section 11150. Provides that the State Board of Charities may provide training for children classified in Sections 11147 to 11149, and that the State Board of Charities may provide transportation in certain cases.

Section 11150-a. Provides special instruction for speech defects when there are fifty or more children, but does not require segregation into classes.

Section 11150-b. Provides for borderline defects.

No special provision is made for sight-saving classes, but classes may be organized.

Montana

1. No laws providing for establishment of special classes.
2. Nothing in laws to prevent a school district from establishing special classes.

Nebraska

1. Special classes for the deaf only.
2. There is nothing in the law which would prohibit local school boards from organizing and maintaining sight-saving classes.

Nevada

Defectives are cared for by a state fund in institutions in California or Utah.

No state law providing for special classes, and State Superintendent writes that probably they could not be cared for in neighboring states.

New Hampshire

No special laws authorizing districts to establish special classes, but there is no law which prevents the establishment in any school district of a special class for children with defective vision.

New Jersey

Section 191 of the School Law provides for the instruction of blind children, by authorizing the establishment of special classes by

local school districts; the establishment of such classes is *compulsory*, however, only when there are five or more eligible children. It is the opinion of the State Commissioner of Education that it is not necessary for children to be totally blind to be placed in classes for the blind.

Teachers of such classes may be considered special teachers and receive an apportionment from the County Superintendent of \$500. In addition, the district receives approximately eight cents per day based upon the actual number of days attended.

New Mexico

No special classes.

The State Department of Education is of the opinion that the school law gives the local school district sufficient authority to organize special classes. However, there is a limiting provision in the code requiring that the State Budget Auditor approve budgets for all school purposes. In other words, budgets which are made would have to make definite provisions for such expenditures before local districts would have any authority to make them.

New York

"If the board of education of a city or union free school district establishes one or more special classes for the instruction of deaf, blind, crippled, or otherwise physically defective children, as provided in this article, and shall employ one or more teachers for the instruction thereof, the Commissioner of Education shall apportion to such city or district in the same manner as teachers' quotas are apportioned thereto, an amount equal to one-half of the salary paid to each of such teachers, but not to exceed one thousand dollars (\$1,000) for each teacher so employed. No such apportionment shall be made on account of a teacher so employed unless there shall have been issued to such teacher by the Commissioner of Education a certificate authorizing such teacher to teach such special classes or unless such teacher shall possess the qualifications prescribed by the Commissioner of Education."

In New York City the teachers must meet the following conditions:

"In order to secure the best teachers for these children the eligibility requirements have been established as follows:

- (1) Three years' experience in teaching.

- (2) Completion of courses dealing with the problems of educating the various types of handicapped children, amounting to at least

120 hours. { 60 hours Methods
 30 hours Clinical Experience
 30 hours Specialized Physical Training

“Teachers who are eligible for the license must pass a written and an oral examination.

“As this license implies a promotion both in salary and possibly in rank the Board of Examiners feels that it is necessary to demand a high standard of record and teaching ability from those who seek to obtain the license.

“There have been certain difficulties in meeting the above requirements. Teachers wishing to qualify for the licenses have not always been able to obtain the courses which deal with the particular specialty. The colleges and universities however have been gradually attempting to meet this demand.

“Teachers licensed since 1920. These qualified on the basis of: (a) Written examination, (b) At least three years of experience in the regular classes, (c) Excellent record, (d) Courses, 120 hours, (e) Oral examination.”

Outside of New York City the State Board of Regents requires that the teachers must have the following minimum qualifications:

A. FOR THE ELEMENTARY GRADES

1. Hold a diploma from a New York State normal school or its equivalent which course included work in the field of the particular kind of special class supervision and instruction in which it is sought permission to teach,

OR

2. Hold a license valid to teach in the elementary grades in this State and have had in addition at least one 6 weeks' course covering not less than 6 semester hours' work in the field of such special class instruction,

OR

3. Hold a license valid in the elementary grades in this State and have had not less than 1 year of successful experience as such special class instructor.

B. FOR THE HIGH SCHOOL GRADES

Hold a license valid to teach in the academic grades in this State and have had in addition the special training or experience specified in above numbered paragraphs 1 or 2 or 3.

The required training and experience in teaching a sight-saving class will not be accepted as qualifying to teach a class for the blind, nor will training and experience in teaching a class for the blind be accepted as qualifying to teach a sight-saving class.

North Carolina

No school law authorizing the establishing of special classes.

Local communities may, however, organize such classes if they desire.

North Dakota

No law providing for establishment of special classes.

Ohio

The Ohio school law provides for the organization of special classes for deaf, blind, and crippled children.

Permission to establish is granted by the Director of Education who may arrange with any board of education to pay for the number of pupils meeting standards and restrictions. A district sending a child may pay tuition and transportation and, upon direction of Director of Education, *shall* pay.

Provision is made for the instruction of crippled children who cannot attend school to be instructed at home.

Each district certifies to the Director of Education the number of pupils who receive instruction in special classes and the amount expended for special appliances and for current operating cost of education, and also a statement showing the per capita cost of education of normal children.

"Sight-saving pupils were for some time classified as blind, to meet the terms of the state law. This was changed last session of the legislature. Children with partial vision now come under the law also.

"Teachers are appointed as other public school teachers, but must possess, in addition to the usual qualifications, such special training and equipment as the State Director of Education or the Board of Education may require. The state law provides for the appointment of a suitable person to inspect all special classes. The Director of Education prescribes standard requirements for all special classes.

"The state law provides that the state shall pay a per capita cost

in an amount not to exceed \$375 for educating the blind on the basis of a nine-months' school year. However, reimbursement is made at the discretion of the Director of Education. For the last two years reimbursement has been held not to exceed \$300 per capita for a nine-months' school year. This amount is in addition to that allowed by the local board of education for normally sighted children.

"The Ohio State Department of Education has special leaflets printed giving the complete law."

Oklahoma

No special classes provided by law.

Any district, however, may organize special classes.

Oregon

No special classes are provided for by law, and the State Superintendent writes that no city is authorized under the general school law to provide for such classes.

Pennsylvania

Chapter 46 of the Laws of 1925 provides:

"On or before the first day of October of each year, the secretary of the board of school directors in each district in which special education for physically or mentally handicapped children is provided shall make such reports in regard to such special education maintained during the previous school year, and that for which the approval of the State Council of Education for the current year is desired, as may be required by the Department of Public Instruction. When any child between the ages of six (6) and twenty-one (21) years of age resident in this Commonwealth, who is blind or deaf, is enrolled, with the approval of the Department of Public Instruction, as a pupil in any of the schools or institutions for the blind or deaf, under the supervision of and approved by the Department of Public Instruction, the school district in which such child is resident shall pay twenty-five per centum (25%) of the cost of tuition and maintenance of such child in such school or institution, as determined by the Department of Public Instruction; and for the tuition and maintenance of such children the Commonwealth shall pay, out of funds appropriated to the department for special education, seventy-five per centum (75%) of the cost of their tuition and maintenance, as determined by the department. When any person less than six (6) or more than twenty-one (21) years of age resident in this Commonwealth, who is blind or deaf, is enrolled, with the approval of the

Department of Public Instruction, as a pupil in any of the schools or institutions for the blind or deaf, under the supervision of and approved by the Department of Public Instruction, the Commonwealth shall pay to such school or institution, out of moneys appropriated to the department for special education, the cost of tuition and maintenance of such person, as determined by the Department of Public Instruction. To facilitate payments by the several school districts, to the schools or institutions in which deaf or blind children are enrolled, of amounts due by such districts for their proportion of the cost of tuition and maintenance of such children, the Superintendent of Public Instruction shall withhold, from any moneys due to such districts out of any State appropriation for the assistance as reimbursement of school districts, the amounts due by such districts to such schools or institutions for the blind or the deaf, and amounts so withheld shall be paid to such schools or institutions by warrant of the Auditor General upon the State Treasurer, after requisition of the Superintendent of Public Instruction, for which purpose all amounts so withheld are hereby specifically appropriated to the Department of Public Instruction. Payments of the Commonwealth's proportion of the cost of tuition and maintenance of blind or deaf pupils enrolled in schools or institutions for the blind or for the deaf, as hereinbefore provided, shall be made quarterly out of moneys appropriated to the Department of Public Instruction for special education, by warrant of the Auditor General upon the State Treasurer, after requisition by the Superintendent of Public Instruction. For the purpose of enabling the Department of Public Instruction to determine from time to time what amounts are due to schools for the blind or for the deaf hereunder, such schools shall forward to the department, at such times and in such form as the department shall prescribe, sworn statements setting forth the names, ages, and residences of all pupils enrolled hereunder, specifying the school districts liable for a part of the cost of tuition and maintenance of any such pupils, the per capita cost of and maintenance of pupils, and such other information as the department shall require."

APPROVED—The 26th day of March, A. D. 1925.

GIFFORD PINCHOT.

Chapter 50 of the Laws of 1925, in arranging for the salaries of teachers, provides

"That for each full-time teacher of a special class, and for each full-time supervisor or principal of special schools or classes organized by any school district and approved under legislation providing for the special education of physically or mentally handicapped pupils, there shall be paid to the district, in addition to other payments

herein provided, sums as follows: To districts of the first class, twenty-five per centum (25%), and to other districts, thirty per centum (30%) of the minimum salary respectively prescribed herein for elementary teachers in such respective districts; and for each part-time teacher, supervisor, or principal employed in approved special education, a fraction of such amounts proportional to the time for which such person is employed; and provided further, that the total amount paid to any school district on account of any such teacher, supervisor, or principal employed in special education shall not exceed eighty per centum (80%) of the salary actually paid to such person."

Chapter 49 of the Laws of 1925 provides that

"Every parent, guardian, or other person in this Commonwealth having control or charge of any child between the ages of six and sixteen years who is deaf or blind, or is so crippled, or whose hearing or vision is so defective as to make it impracticable to have such child educated in the public schools of the district in which he is a resident, shall allow such child to be sent to some school where proper provision is made for the education of the deaf, or of the blind, or of crippled children, or shall provide for the tuition of such child by a legally certified private tutor."

To summarize, the Legislature of 1925 put the program of special classes on a substantial basis by making appropriations for (1) subsidy to school districts for special education in special classes, and (2) payment of the State's share of the tuition and maintenance of blind or deaf pupils in residential schools.

Qualifications of Teachers: To be approved for special state aid, special classes in the public schools must be taught by persons holding a special class teacher's certificate. Requirements for the standard certificate and partial certificate are set forth in a special pamphlet issued by the State Department. In addition to the usual requirements there must be special professional preparation in the particular field which is to be taught.

Rhode Island

No legislation dealing with special classes.

No legal obstacle to the establishment by a local school committee.

South Carolina

No special classes provided.

Local districts are authorized by General School Law to establish special classes.

South Dakota

No state law providing for special classes.

Tennessee

No provision for special classes of any kind.

Local districts may establish special classes under the general law.

Texas

No state act providing for special classes.

Utah

No law for special classes, but nothing in the Utah school law which prohibits their establishment. No rules and regulations have been formulated by the State Department of Public Instruction.

Vermont

No state law provides for the establishment of special classes. However, local districts have authority to establish them under the general act.

Virginia

No special act. However, general law provides for the establishment of special classes without designating the precise specialty.

Cities may establish classes for children of defective vision and any county may likewise establish similar classes.

Washington

"Every board of directors of a school district of the first class shall, in addition to the general powers enumerated in chapter XVII(XV) of this title have the power . . . to adopt and enforce such rules and regulations as may be deemed essential to the well being of the schools, and to establish and maintain such grades and departments, including night, high, kindergarten, manual training and industrial schools and schools and departments for the education and training of any class or classes of defective youth, as shall, in the judgment of the board, best promote the interests of education in that district. . . . "

The State allows the special classes five times the amount which is given pro rata to the school districts for the normal child. This amount equals about fourteen cents per diem. The special classes, therefore, receive about seventy cents per diem for every day's attendance. In addition the counties allow amounts ranging from seven to nine cents per diem for every day's attendance.

West Virginia

No legislation providing for the establishment of special classes; nothing in the law prohibiting the establishment of such classes.

Wisconsin

Section 41.035 provides in general terms for the establishment of special classes for exceptional pupils, and also provides for the appointment of a state supervisor for this work.

Section 41.01 provides specifically for the establishment of day school classes for the deaf or blind. (Children with partial vision are considered for the purposes of classification as blind.)

Section 41.02 provides for the compulsory attendance of the children eligible for classes for the blind or deaf.

Section 20.32 provides for a fund not to exceed \$145,000 for the instruction of deaf persons, or persons with defective speech, or for the instruction of blind persons. It provides that a sum not to exceed \$250 shall be apportioned to any resident of a district attending these classes, and for each person a resident of the state but outside the district the sum of \$400.

Wyoming

Special classes of all kinds are provided for under the Wyoming state law.

So far no sight-saving classes have been established.

APPENDIX B

Equipment for Serving Hot Lunches

Equipment needed in sight-saving classes where there are no facilities for serving a hot lunch:

Individual plates	One dozen each:
Soup bowls	Knives
Glasses	Forks
Sauce dishes	Teaspoons
Sugar bowl	Dessertspoons
One large pitcher	
Two salt shakers	

One large stew pan
One large double boiler
One bread knife
Two vegetable knives
One large spoon
One dish pan
One dish drainer
One can opener
Two dish mops
One dozen tea towels
Paper napkins
Soap

Binder
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